

# FIRST ANNUAL TXDOT COLLEGE CHALLENGE – GUIDELINES

The Texas Department of Transportation's (TxDOT) College Challenge invites undergraduate students at Texas' four-year public and private colleges and universities to form interdisciplinary teams to develop innovative concepts that address the state's future mobility, connectivity, and transportation safety requirements. Students will be rewarded for their ability to communicate their ideas, their innovation, and for developing interdisciplinary approaches.

#### Overview

Texans are privileged to have a dynamic economy, growing population, and vibrant culture. The flipside is that we also have increasing levels of traffic congestion, a critical need to find more efficient ways to move commodities, and an ongoing challenge to make travel safer. Our agency firmly believes that today's students possess the creative perspective necessary to develop the transportation systems of tomorrow.

TxDOT asks these future leaders: How can we make the most of Texas' transportation system of the 21st century?

Students should apply their proposals to one or more of TxDOT's four strategic goals:

- Addressing congestion
- Providing a safe transportation system
- Connecting Texas communities
- Being a best-in-class agency

Examples of topics that support those goals include, but are not limited to:

- Innovative construction approaches, highway designs, or planning methodologies
- Innovations in how we fund and maintain our transportation assets
- Moving freight more efficiently
- Leveraging technology to reduce congestion
- Clearing crashes off the roadways faster
- Changing driver behavior to improve safety (speeding, distracted driving)

The topics above are just examples – don't limit your imagination! What do you want your transportation system to look like in the future? How will your idea get us there? We're looking to students to develop innovative solutions to these real-world transportation issues and to share those innovations with the broader community.

# **Eligibility Requirements**

- 1. Students must be U.S. citizens, permanent residents, or possess a valid student visa.
- 2. Students must be enrolled at a Texas four-year public or private college or university for the Fall 2013 semester or quarter.
- 3. No team member may be an employee or child of an employee of the Texas Department of Transportation.
- 4. Teams may consist of no more than five members, all students. TxDOT expects that successful teams will have three to five members representing multiple disciplines, such as engineering, communications,



finance, environmental, planning, or other backgrounds. Each member of the team must meet the above criteria,

- 5. Each team must have at least one faculty advisor from that team's college or university.
- 6. Each team may only submit one proposal, and a student may only participate on one team.

#### **Submission Requirements**

Each team should submit one proposal package (entry form, written proposal, video, etc.) under the rules promulgated by the Texas Department of Transportation; A submission package of the final project will consist of the following sections, in this order:

- 1) Online Registration Form
- 2) An Executive Summary (no more than two pages) that includes:
  - a. Project Title
  - b. Sponsoring University and faculty advisor
  - c. Project Team members
  - d. Brief description/abstract of project
  - e. Project goals
- 3) A Project Proposal describing the innovative concept, written by the student team (10-page limit), to include a description of major program activities, a proposed project timeline, expected project benefits, and planned evaluation methodology.
- 4) A video of no more than five minutes in length describing their concept. Videos should be provided in an mp4 format, and are limited to five minutes or less. For judging purposes, please limit the frame size to 640 x 320, and the bitrate to 5 Mbps. Finalists may be asked to provide a full-resolution copy for the 9<sup>th</sup> Annual Texas Transportation Forum.

All materials should be uploaded to the Website address provided. All entries must be received by 11:59 pm Central standard time on **November 15, 2013.** Award administrators assume no responsibility for lost or untimely submissions for any reason.

Each team member shall agree to execute indemnifications and waivers of claims against the state of Texas government as provided in the registration materials.

#### **Questions About the Guidelines**

TxDOT recognizes that potential participants may have additional questions about the contest guidelines. All such questions must be emailed to <a href="College-challenge@txdot.gov">College-challenge@txdot.gov</a> <a href="mailto:no later than Friday">no later than Friday</a>, <a href="Sept. 27">Sept. 27</a>. We will maintain a running list of all questions and responses which will be updated every Tuesday and Friday during the month of September. These responses will be published on the College Challenge web page at <a href="http://www.txdot.gov/inside-txdot/get-involved/college-challenge.html">http://www.txdot.gov/inside-txdot/get-involved/college-challenge.html</a> and should will be considered supplemental to the contest guidelines.

# **Proprietary Statement**

Each team owns its innovative concept and contest submission; however, team members will be required to sign a licensing agreement granting TxDOT the right, without charge, to implement any submitted ideas to benefit the Texas Transportation system and the people of Texas and to post finalists' videos and proposals on the TxDOT website, www.TxDOT.gov.



# Basis upon which the Winning Concept Will Be Selected:

All submissions will be initially screened by a TxDOT evaluation team for responsiveness. Submissions meeting the eligibility requirements and deemed responsive will be evaluated by a panel of judges formed at TxDOT's discretion. The top teams will be required to present their concept at the 9th Annual Texas Transportation Forum in San Antonio, Texas on January 6-8, 2014. Winners will be selected through a scoring methodology that may include a live audience vote at the Forum.

Submissions will be evaluated according to the following criteria:

#### **EVALUATION CRITERIA**

#### 1. Fit to TxDOT Strategic Goals

Does the proposal support one or more of the 4 stated goals?

#### 2. Innovativeness

How innovative the idea is will be heavily considered as well as the importance and scope of the problem/opportunity.

# 3. Business potential and value creation

Judges will score entries based on whether or not the idea has potential to create economic or social value such as the potential for wealth creation or the potential to reduce costs. The ratio of likely benefits to implementation costs will be considered. If the submission is a product idea, judges will consider monetization requirements as well as potential cost savings. These analyses should be included in the team proposal.

# 4. Quality of Description

Applicants will be judged on their ability to provide a clear and convincing description of a problem or opportunity and their approach to addressing it. Judges will consider the level of thoughtfulness needed to identify the issue and the solution.

#### 5. Sustainability and relevance for society

The level of impact that the idea will have on the identified problem/opportunity, as well as the value proposition to the beneficiary, will be considered by the judges. Additionally, the size of the population that will be impacted will be assessed. Ideas with a greater impact will be scored higher.

#### **Announcement of Winner**

Teams receiving the highest scores (i.e., "finalists") from the evaluation panel will receive a paid trip to the 9th Annual Texas Transportation Forum in San Antonio, Texas on January 6-8, 2014 to present their proposals during a special conference session, followed by a moderated discussion. The winning team or teams will be announced prior to the Forum's conclusion on January 8, 2014.

A plaque with the winning team's institution and date of award will be displayed at the TxDOT headquarters, Dewitt C. Greer Building, 125 E. 11<sup>th</sup> Street, Austin, TX 78701.



# **Important dates**

### **Submission Period:**

**Start:** August 30, 2013

**End:** November 15, 2013 11:00 PM CDT

Finalists announced: December 15, 2013, 09:00 AM CDT

Winners announced: 9th Annual Texas Transportation Forum, January 6-8, 2014, San Antonio, Texas

# General information and submission instructions

Texas Department of Transportation

125 E. 11<sup>th</sup> Street

Austin, Texas 78701

Contest website: <a href="http://www.txdot.gov/inside-txdot/get-involved/college-challenge.html">http://www.txdot.gov/inside-txdot/get-involved/college-challenge.html</a>

Contest Email: College-challenge@txdot.gov

Contest Phone number: (512) 416-4730

Submit entries as follows:

- 1) Go to <a href="https://ftp.dot.state.tx.us/dropbox/">https://ftp.dot.state.tx.us/dropbox/</a>
- 2) Choose the selection for non-TxDOT employees
- 3) Complete information about the submitting team
- 4) Complete Recipient information as follows:
  - a. Name: College Challenge
  - b. Email: College-challenge@txdot.gov
- 5) Upload all required files: Completed, signed and scanned application; executive summary; project proposal; video (mp4 format, as described in Submission Requirements section above).
- 6) Click "Drop-off the File(s)"
- 7) If you experience any difficulty in submitting the required documents, please email us at college-challenge@txdot.gov.



# **Texas Department of Transportation**

Research and Technology Implementation Office 150 East Riverside Drive | Austin, Texas | 78704 **P**: 512.416.4730

| Office Use Only |
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| TxDOT Number:   |
| Date Rec'd:     |
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# TxDOT College Challenge Contest Online Application Form

| Sponsoring University:                                      |        |                        |                      |        |      |  |  |  |
|---|--------|------------------------|----------------------|--------|------|--|--|--|
| PROJECT TITLE:  |        |                        |                      |        |      |  |  |  |
| Brief (<200 words) description of proposed solution/concept |        |                        |                      |        |      |  |  |  |
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|   |        |                        |                      |        |      |  |  |  |
| Primary Faculty Advisor:                                    |        |                        |                      |        |      |  |  |  |
| Name:   |        |                        |                      |        |      |  |  |  |
| Title   |        |                        |                      |        |      |  |  |  |
| Department:   |        |                        |                      |        |      |  |  |  |
| Addresss  |        |                        |                      |        |      |  |  |  |
| City:   |        | State:                 | Zip:                 |        |      |  |  |  |
| Phone:  |        | Fax:                   |                      |        |      |  |  |  |
| E-mail:   |        | Institutional Website: |                      |        |      |  |  |  |
| TEAM MEMBER   |        |                        | TEAM MEMBER          |        |      |  |  |  |
| Name:   |        |                        | Name:                |        |      |  |  |  |
| Address:  |        |                        | Address:             |        |      |  |  |  |
| City:   | State: | Zip:                   | City:                | State: | Zip: |  |  |  |
| Phone:  | Fax:   |                        | Phone:               | Fax:   |      |  |  |  |
| E-mail:   |        |                        | E-mail:              |        |      |  |  |  |
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| Major/area of study:  |        |                        | Major/area of study: |        |      |  |  |  |



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|---|---|--|---|--|---|
| TEAM MEMBER   |   |  | TEAM MEMBER   |  |   |
| Name:   |   |  | Name:   |  |   |
| Address:  |   |  | Address:  |  |   |
| City:   | State:  | Zip:   | City:   | State:   | Zip:  |
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| Website:  |   |  | Website:  |  |   |
| Major/area of study:  |   |  | Major/area of stud  | ly:  |   |
| TEAM MEMBER   |   |  |   |  |   |
| Name:   |   |  |   |  |   |
| Address:  |   |  |   |  |   |
| City:   | State:  | Zip:   |   |  |   |
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| Major/area of study:  |   |  |   |  |   |
| statement of certific knowledge and belief the debarment, declared ine agency; b) have not with of or had a civil judgment with obtaining, attemption under a public transaction theft, forgery, bribery, faproperty; c) are not present (federal, state, or local) we certification; and d) have | at it and its pri<br>ligible, or volu<br>in a three-yea<br>t rendered aga<br>ng to obtain, o<br>n; violation of<br>alsification or o<br>ently indicted<br>vith commission | ncipals: a) ar<br>untarily exclu-<br>or period prec<br>ainst them for<br>or performing<br>federal or st<br>destruction of<br>for or otherw<br>on of any of t | e not presently debaded from covered traceding the submittal or commission of fraceg a public (federal, state antitrust statutes of records, making falvise criminally or civilithe offenses enumerated | rred, suspended, pransactions by any fedate of this applicated or a criminal offedate, or local) transactions, or commission of less statement, or really charged by a govated in paragraph (b | oposed for deral department or deral department or department or department or department or department or department, department of this |
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| Primary faculty advisor for   |   |  |   |  |   |
| Sponsoring University:  |   |  |   |  |   |
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| i earri Mernber 1:  |   |  |   |  |   |

(Type name of team member 1)

Date \_\_\_\_\_



| Team Member 2: _ |                              |      |
|------------------|------------------------------|------|
| _                |                              | Date |
|                  | (Type name of team member 2) |      |
| Team Member 3: _ |                              |      |
| _                |                              | Date |
|                  | (Type name of team member 3) |      |
| Team Member 4: _ |                              |      |
| _                |                              | Date |
|                  | (Type name of team member 4) |      |
| Team Member 5: _ |                              |      |
| _                |                              | Date |
|                  | (Type name of team member 5) |      |